

DRAFTING CRITERIA
Revision date: 02/14/00

General

1. Drafting services and related activities required by the Scope of Work may include some or all of the following: base map preparation including engineering documents research, field verification, and drafting; contract drawing drafting including plans, profiles, detail drawings, vicinity map, notes, etc.; reprographics and reproduction.
2. The Consultant's final plans shall be in accordance with the most current City of Seattle SPU CAD drafting standards (CAD) and supplemented by the Drafting Standards and Procedures Manual (DSPM) unless by mutual agreement. Contact Lori Palmen at 206-684-5206 or Lori.Palmen@ci.seattle.wa.us or Dean Noble at 206-684-5137 or Dean.Noble@ci.seattle.wa.us for standards.
3. The current edition of the "Seattle Standard Specifications" and "City of Seattle Standard Plans" shall be adhered to.
4. The DSPM section 36 contains sample drawings. If needed, additional sample base map(s) and sample improvement plans shall be furnished by SPU to be used as a guide throughout the project. All features shall be researched, drafted and identified as indicated.
5. Plans shall be oriented with north directed up or left (within upper left quadrant).
6. All base maps and design projects will be geo-referenced to the Washington State Lambert Grid Coordinate System using the NAD83(1991) datum as established in accordance with chapter 58.20 Revised Code of Washington. Vertical datum shall be NAVD 1988. The references to both horizontal and vertical control shall be shown in the project drawing notes. Exceptions must be approved by the Chief Surveyor of Seattle Public Utilities.
7. Standard Sheet size is 22 inches by 34 inches.
8. The final product shall be fixed-line photo mylar on 3 mil or thicker mylar with seal and signature affixed and AutoCAD files of the final product created according to SPU AutoCAD drafting standards.

Base Maps

1. Base Map drawings shall be created to the SPU AutoCAD standards.
2. The consultant shall perform all records research necessary to determine the actual existing conditions. The list of Sources of Information (DSPM, Section D) may be used as a guide for locating data (it is not necessarily complete nor current). The document that installed an improvement is the source information and is noted on the base map reference layer. All sources of information must be checked and records conflicts resolved. The Consultant shall maintain a list of sources of information (plan numbers, field books, utility books, etc.) used in preparation of plans and shall furnish this list upon completion of base map.
3. City documents may not be removed from City premises. Therefore, the City will make provisions for the Consultant to obtain necessary copies through the use of City reproduction facilities or vendors under contract with the City. Such copies, identified by the Consultant as necessary to the research and production of plans of existing facilities, will be paid for by SPU.
4. The Consultant shall field check the work as necessary to insure accuracy and completeness of drawings. The field check shall include location of all pertinent topographic features, as well as verification of visual indications of utility location and existence. Field notes shall be maintained and turned in to SPU.
5. Base map drawings shall have accuracy to within the following limits: Control line and R/W line distance shall at no point have an error in excess of 0.01 feet. All surface features shall be located to within 0.2 feet. Underground features shall be located using as-built plan location and visual indicators.
6. Center line Stationing shall be indicated on all Base Maps. When available, use stationing defined by previous City monumentation survey.
7. Features on the drawings shall be shown and noted in accordance with standard abbreviations and symbols (Standard Plan No 002 and 003) and SPU CAD standards.
8. All existing utilities, improvements and topography determined necessary in the project scope, shall be illustrated in the drawing.

Contract Drawings

1. Each set of contract drawings may include one or more of the following:
 - Cover sheet and general notes
 - Site plan
 - Grading plans
 - Sewer and/or drainage plans and profiles
 - Water plans and profiles
 - Mechanical plans
 - Electrical plans
 - Telemetry plans
 - piping schematics
 - details
 - Other information as required.
2. The cover sheet(s) shall include the following:
 - Index to drawings
 - Vicinity map
 - Sheet location map
 - General notes
 - Abbreviations not included in Standard Plan No.002
 - Symbols not included in Standard Plan No. 003.
 - Datum
 - detail and section referencing symbols
3. Plans shall be prepared with such precision and in such detail as to permit the convenient layout in the field for construction and other purposes within a degree of accuracy acceptable to SPU.
4. Plans shall be in such detail as to permit the development of an accurate estimate of quantities for the pertinent items of work to be performed in the construction of the project.
5. The final drawings will be used to create half-sized prints for distribution for bidding and construction. The plans shall provide readily legible reproduction when the plans are reduced to half-size.
6. SPU will provide the consultant an AutoCAD file of the SPU title and border to be used for all contract drawing sheets.
7. The horizontal scale for plans and profiles shall be one inch equals 20 feet unless otherwise requested. Vertical scale for profiles shall be one inch equals 10 feet unless otherwise requested. Scale for details shall be as needed for clarity.

8. Improvements should be located by monument line stations with offsets designated accordingly.
9. Clearly identify items to be removed or abandoned. If the line work of a detail is of such density that the new work cannot be readily distinguished from existing features, the detail will be modified to emphasize the new work.
10. Where an improvement continues on to another sheet, include the callout "matchline, see sheet XX" where XX = the appropriate sheet number.
11. Detail and section referencing shall adhere to the attached sheet.
12. Draw all views to scale, or as nearly as possible to scale.
13. Details should be drawn with the same orientation as their parent view, and with sufficient surrounding detail to establish their relationship to the project.